

# **Health & Safety Manual**

## **Supplement 8.07**

### **ES&H Requirements for Equipment Repair, Transfer, Storage, and Excess**

**August 1994**

**Approved by the ES&H Working Group**

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R o n a l d  
Laboratory Executive Officer

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**ES&H Requirement for  
Equipment Repair,  
Transfer, Storage, and Excess\***

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# **ES&H Requirements for Equipment Repair, Transfer, Storage, and Excess**

## **1.0 Introduction**

### **1.1 Purpose and Scope**

A wide variety of equipment is purchased by the Laboratory to meet operational or programmatic demands. The repair and maintenance required on such equipment during its life cycle is performed onsite or offsite by LLNL personnel or vendors. On occasions, it may be necessary to store useful equipment offsite for anticipated future needs. Equipment that is no longer needed at LLNL because of the termination of a project, redirection of research, or replacement by newer or updated equipment may be transferred to another LLNL user; released as excess to other federal government agencies or their subcontractors, local government agencies, universities, or schools; or offered for sale to the general public.

This supplement contains the following:

- Procedures (including controls) for equipment moved from its current location and transported offsite for repair, onsite for reuse, or to the Donation, Utilization, and Sales (DUS) Group for remote storage or excess. To comply with federal and state regulations, these procedures include measures for protecting the environment and health and safety of LLNL employees and the general public in cases where the equipment is contaminated with radioactive and hazardous materials.
- Responsibilities of equipment custodians; the Hazards Control Department; the Environmental Protection Department; the Traffic Office and Shipping/Receiving Group within the Services and Distribution Department; the Materials Management Section; the Contracting and Material Management Department (C&MMD); and the Property Management Division (Donation, Utilization, and Sales (DUS) Group).

Appendix A contains the terms and definitions used in this supplement; Appendix B contains guidelines for excessing unused and surplus chemicals. The other appendices contain forms associated with this supplement.

*This supplement does not address the disposal of equipment as hazardous or radioactive waste or the sale of such equipment as scrap metal. Contact your environment analyst for guidance on the disposal of such equipment, if necessary. Procedures for handling special nuclear materials, chemicals (except for those in Appendix B), and hazardous wastes can be found in Chapter 8 of the *Health & Safety Manual*.*

## 1.2 Applicability

*This supplement applies to all usable equipment that may be contaminated with or used to handle, store, or modify hazardous or radioactive materials; certain types of chemicals; unopened containers of chemicals (Appendix B); bulk oils or other valuables; and used materials (e.g., machine tools, vacuum pumps, glove boxes, capacitors).*

## 2.0 Procedures for Risk Reduction

The procedures below allow a custodian (based on his/her knowledge of the history of the equipment) to certify that LLNL and the Department of Energy (DOE) equipment is free of radioactive or hazardous materials before such equipment is transferred onsite or offsite for repair, maintenance, or storage; onsite for reuse; or to the DUS Group to be entered into the excessing system. These procedures include detailed guidance in the event the custodian is unable to certify the equipment. See Appendix C for a summary of these procedures.

### 2.1 Transfer of Equipment Offsite for Repair or Maintenance

Do the following when transporting equipment offsite for repair or maintenance (see Section 2.2 for onsite repair):

1. Check the warranty of the equipment to be repaired.
  - If the equipment is still under warranty, notify the C&MMD so that arrangements can be made for repair.
  - If the equipment is not under warranty, prepare a purchase order. *No purchase order is required for blanket maintenance agreements.*
2. Complete “BOX 1” on the Equipment Release (see Appendix D).
3. Determine if you can certify the equipment is free of hazardous or radioactive materials (see “BOX 2” on the Equipment Release).
  - If you can certify the equipment, complete “BOXES 2–4” on the Equipment Release then proceed with step 5.
  - If you cannot certify the equipment, do the following:
    - Have the area health and safety technician (a) collect swipe samples from the equipment and analyze them for radioactive and toxic materials, and (b) obtain and analyze samples of unencapsulated fluids with the potential for having been contaminated with radioactive materials. (The health and safety technician will take internal and external surface swipes based on the equipment’s operating history, the potential sources of contamination, and professional judgment. Other members of the ES&H team will

evaluate both the adequacy of the sampling procedure and the results of the samples on a case-by-case basis.)

- Have the environmental, safety, and health (ES&H) team health physicist or the industrial hygienist evaluate the sample results;
- Continue with steps 4–10.

NOTE: The equipment contamination level (radioactive or hazardous) should be below the applicable limits to ensure the safety of LLNL personnel and the staff of offsite organizations, including safe transport of the equipment on public roads. Contact the Materials Management Division to obtain the Department of Transportation (DOT) shipping limits and the receiving organization for its requirements on accepting equipment contaminated with hazardous or radioactive materials.

4. Do one of the following, as appropriate, if the equipment is contaminated above established limits:

- Clean the equipment. Contact the ES&H team for cleaning procedures.

NOTE: Have the health physicist and/or industrial hygienist complete “BOX 6” on the Equipment Release only after the equipment has been properly cleaned. If the health physicist or industrial hygienist checks the “not fully characterized” box (see Appendix A for definition), make sure that he/she indicates on the Equipment Release the types of hazardous or radioactive materials that may be present in the unsampled areas.

- Arrange for disposal of the equipment as hazardous waste. Contact the environmental analyst for guidance on disposal.

5. Drain and dispose of unencapsulated oils or fluids with the assistance of the Hazardous Waste Management (HWM) field technician.
6. Place equipment that contains (or contained) liquids in a secondary containment before transportation. The Manufacturing and Materials Engineering Division (M&MED) can construct the appropriate secondary containment.
7. Complete “BOX 5” on the Equipment Release.
8. Prepare the equipment and the necessary paperwork (equipment histories, user’s manuals, material safety data sheets [MSDSs] for remaining liquids) for transfer to the receiving organization.
9. Submit to C&MMD the purchase requisition or warranty information, as appropriate.
10. Make arrangements with the Property Center representative to
  - sign a shipping request form and release the item in the property information system (PRISM);

- arrange for transportation of the equipment through the Shipping/Receiving Group within the Services and Distribution Department;
- inform C&MMD of any possible internal contamination noted on the Equipment Release.

NOTE: The Shipping/Receiving Group and the Traffic Office will ensure that equipment leaving LLNL meets DOT requirements, is properly secured, and is placarded.

## **2.2 Transfer of Equipment Onsite for Repair or Reuse**

Do the following when transferring equipment onsite for repair or reuse:

1. Complete "BOX 1" on the Equipment Release.
2. Determine if you can certify the equipment is free of hazardous or radioactive materials (see "BOX 2" on the Equipment Release).
  - If you can certify the equipment, complete "BOXES 2-4" on the Equipment Release then proceed with step 4.
  - If you cannot certify the equipment, do the following:
    - Have the area health and safety technician (a) collect swipe samples from the equipment and analyze them for radioactive and toxic materials, and (b) obtain and analyze samples of unencapsulated fluids with the potential for having been contaminated with radioactive materials. (The health and safety technician will take internal and external surface swipes based on the equipment's operating history, the potential sources of contamination, and professional judgment. Other members of the ES&H team will evaluate both the adequacy of the sampling procedures and the results of the samples on a case-by-case basis.)
    - Have the ES&H team health physicist and/or industrial hygienist evaluate the sample results.
    - Continue with steps 3-9.
3. Do one of the following, as appropriate, if the equipment is contaminated above the limits specified by the Hazards Control Department:
  - Clean the equipment. Contact the ES&H team for cleaning procedures.
 

NOTE: Have the health physicist or industrial hygienist complete "BOX 6" on the Equipment Release only after the equipment has been properly cleaned. If the health physicist or the industrial hygienist checks the "not fully characterized" box, make sure that he/she indicates on the Equipment Release the types of hazardous or radioactive materials that may be present in the unsampled areas.
  - Arrange to have the equipment disposed of as hazardous waste. Contact the environmental analyst for guidance on disposal.

- Contact the ES&H team to see if the equipment can be transported with restrictions.
- 4. Drain and dispose of unencapsulated oils and liquids with the assistance of the HWM field technician.
- 5. Place the equipment in a secondary containment if it is being transferred for reuse or repair. M&MED can construct the appropriate secondary containment.
- 6. Have the appropriate Property Center representative
  - complete “BOX 7” on the Equipment Release only if the equipment is property-numbered or is being transferred to another Property Center;
  - release the equipment number to the new Property Center via PRISM.
- 7. Complete “BOX 5” on the Equipment Release.
- 8. Affix a Delivery Tag (LL1158-1) to the equipment.
- 9. Make arrangements with the Transportation Group within the Services and Distribution Department to have the equipment and all the necessary paperwork (equipment histories, user’s manuals, MSDSs for remaining liquids) transferred to the receiving organization.

## **2.3 Transfer of Equipment for Storage**

Do the following before placing equipment into storage:

1. Determine if you can certify the equipment is free of hazardous or radioactive contamination (see the “Certification” box on the Storage Release).
  - If you can certify the equipment, complete the Storage Request then do steps 3, 7, and 8.
  - If you cannot certify the equipment, do the following:
    - Complete the Storage Request and “BOX 1” on the Equipment Release.
    - Have the area health and safety technician (a) collect swipe samples from the equipment and analyze them for radioactive and toxic materials, and (b) obtain and analyze samples of unencapsulated fluids with the potential for having been contaminated with radioactive materials. (The health and safety technician will take internal and external surface swipes based on the equipment’s operating history, the potential sources of contamination, and professional judgment. Other members of the ES&H team will evaluate both the adequacy of the sampling procedure and the results of the samples on a case-by-case basis.)
    - Have the health physicist and/or the industrial hygienist evaluate the sample results.

— Continue with steps 2–8.

NOTE: The equipment contamination level (radioactive or hazardous) should be below the applicable limits and in accordance with DOT regulations to ensure the safety of LLNL personnel and the staff of offsite organizations, including safe transport of the equipment on public roads.

2. Do one of the following, as appropriate, if the equipment is contaminated above the limits specified by the Hazards Control Department:

- Clean the equipment. Contact the ES&H team for cleaning procedures.

NOTE: Have the health physicist or industrial hygienist complete “BOX 6” on the Equipment Release only after the equipment has been properly cleaned. If the health physicist or the industrial hygienist checks the “not fully characterized” box, make sure that he/she indicates on the Equipment Release the types of hazardous or radioactive materials that may be present in the unsampled areas.

- Arrange to have the equipment disposed of as hazardous waste. Contact the environmental analyst for guidance on disposal.

3. Drain and dispose of unencapsulated oils or fluids with the assistance of the HWM field technician.

4. Place equipment that contains (or contained) liquids in a secondary containment. Secondary containments may be available from the DUS Group. Alternatively, containments can be made by M&MED.

5. Complete “BOX 5” on the Equipment Release.

6. Send the green copy of the Storage Request and other appropriate paperwork (Equipment Release, results of equipment analyses, MSDSs for remaining liquids as applicable) to the DUS Group (L-696).

7. Affix a Delivery Tag and the remaining copies of the Storage Request, Equipment Release, and supporting document to the equipment.

8. Notify the DUS Group that the equipment is ready for transport. The Group will then

- arrange for inspection and transportation of the equipment to be placed in storage;
- ensure that any warning pertaining to possible internal contamination is attached to the item.

NOTE: If the storage facility is located outside the confines of the LLNL Site (i.e., Site 300 or Almond Avenue School) and involves travel on a public roadway, the material must go through the Shipping/Receiving Group to determine if it is regulated by DOT. Arrangements for transport will be made by the Traffic Office.

## 2.4 Transfer of Equipment for Excess or Sale

Do the following for equipment to be excessed for reuse:

1. If the item is a machine tool, contact Machine Tool Services to determine if the equipment to be excessed can be used by another LLNL organization. If the equipment cannot be used, Machine Tool Services will provide the manuals, MSDSs, and historical-use information required for excessing the equipment. DUS maintains inventories of all excessed equipment on the PRISM database. Representatives from the Property Center or DUS staff can assist LLNL organizations that may want to reuse equipment.
2. Determine if you can certify that the equipment is free of hazardous or radioactive contamination.
  - If you can certify the equipment, complete the Excess Equipment Card (Appendix D) and do steps 4 and 7.
  - If you cannot certify the equipment, do the following:
    - Complete “BOX 1” on the Equipment Release.
    - Have the area health and safety technician (a) collect swipe samples from the equipment and analyze them for radioactive and toxic materials, and (b) obtain and analyze samples of unencapsulated fluids with the potential for having been contaminated with radioactive materials. (The health and safety technician will take internal and external surface swipes based on the equipment’s operating history, the potential sources of contamination, and professional judgment. Other members of the ES&H team will evaluate both the adequacy of the sampling procedure and the results of the samples on a case-by-case basis.)
    - Have the ES&H team health physicist or industrial hygienist evaluate the sample results.
    - Continue with steps 3–7.

NOTE: The equipment contamination level (radioactive or hazardous) should be below the applicable limits and in accordance with DOT regulations to ensure the safety of LLNL personnel and the staff of offsite organizations, including safe transport of the equipment on public roads.
3. Do one of the following, as appropriate, if the equipment is contaminated above the limits specified by the Hazards Control Department:
  - Contact the DUS Group and the Materials Management Division to see if the equipment can be reutilized with restrictions.
    - If the equipment contamination level is such that other DOE agencies (Savannah River, Rocky Flats) agree to receive the equipment and DOT regulations allow its transportation, the DUS Group may release the equipment. The DUS Group may also excess

incompletely characterized equipment to other government agencies and their contractors, universities, or schools. However, a warning about any internal contamination must be affixed to the equipment.

- If the equipment can be released, have the industrial hygienist, the health physicist, and/or the environmental analyst complete “BOX 6” on the Equipment Release and indicate the types of hazardous or radioactive materials that may be present in the unsampled areas.
  - Clean the equipment if it cannot be released with restrictions. Contact the ES&H team for cleaning procedures.
  - Arrange for the equipment to be disposed of as hazardous waste. Contact the environmental analyst for guidance on disposal.
4. Drain and dispose of unencapsulated oils or fluids with the assistance of the HWM field technician.
  5. Complete “BOX 5” on the Equipment Release.
  6. Have the appropriate Property Center representative complete “BOX 7” on the Equipment Release and release the property number (for property-numbered items) to the DUS Group via PRISM.
  7. Contact the DUS Group to see if the equipment should be transferred or excessed in place. Large equipment may be excessed in place.
    - If the equipment should be excessed in place, send the necessary paperwork (e.g., equipment release, MSDSs, analytical results) for the equipment to the DUS Group.
    - If the equipment should not be excessed in place,
      - put it in a secondary containment (if necessary);
      - attach a Delivery Tag, the Equipment Release, MSDSs, and analytical results to the equipment;
      - make arrangements with the Transportation Group within the Services and Distribution Department to have the equipment and the necessary paperwork delivered to the DUS Group (B-618).

NOTE: Equipment that is not picked up during the excessing process may be returned to the custodian, handled as scrap metal, or disposed of as hazardous waste. For information on scrapping or disposing contaminated equipment, contact your environmental analyst.

### **3.0 Responsibilities**

Many organizations and personnel at the Laboratory are involved with the repair, transportation, storage, and excess of equipment, particularly when such equipment is contaminated with radioactive or hazardous materials. Thus, each

organization is responsible for ensuring that contaminated equipment comply with DOE and DOT regulations; other federal, state, and local laws; and LLNL policy.

### **3.1 Custodian**

Custodians shall do the following when transferring equipment to another Laboratory employee, to an offsite or onsite organization for repair or reuse, or to the DUS Group for storage or excess:

- Be familiar with the procedures in this supplement for equipment that may contain liquids and/or may have been exposed to or contaminated with toxic or radioactive materials.
- Contact the HWM field technician for guidance on how to properly dispose of hazardous and radioactive waste oils or liquids drained from equipment.
- Provide all necessary information about the historical use of the equipment, including a description of any exposure to or contamination with hazardous or radioactive materials.
- Either certify that the equipment is free of contamination and unencapsulated liquids or request that the Hazards Control Department obtain samples to determine the level of contamination. For samples of bulk liquids, contact the Environmental Protection Department. Contact the DUS Group or the Materials Management Division for guidance if the equipment can be reutilized with restrictions.
- Initiate the necessary forms (purchase orders, the Excess Equipment Card, Equipment Release, Delivery Tag, and Equipment Storage Tag as appropriate).
- Make arrangements to have the equipment cleaned if sampling indicates that the contamination level is too high for transportation or exceeds health and safety requirements. (Contact the ES&H team for the appropriate cleaning procedures. Note that cleaning may not always be cost effective.)
- Ensure that the equipment is properly packaged for safe transport. This includes
  - placing the equipment in a secondary containment, if necessary;
  - labeling and tagging the equipment properly;
  - attaching the appropriate documentation to the equipment (results from equipment analyses, MSDSs for remaining liquids, Excess Equipment Card, Equipment Release, and Storage Request).
- Make arrangements to have the equipment transported onsite or offsite for repair or reuse, or to the DUS Group for storage or as excess. The DUS Group will arrange transportation to the storage facility.

NOTE: If the DUS Group (through its various mechanisms) is unable to reuse, excess, or sell the equipment for its intended purpose, the equipment may be returned to the custodian. Contact your environmental analyst for guidance on how to dispose of the equipment, if necessary.

## **3.2 Environment, Safety, and Health Team**

The ES&H team includes the ES&H team leader, environmental analyst, health physicist, industrial hygienist, and health and safety technicians. These personnel represent both the Environmental Protection Department and the Hazards Control Department.

### **3.2.1 ES&H Team Leader**

The ES&H team leader shall coordinate the activities of the team discipline representatives and the health and safety technicians.

### **3.2.2 Health Physicist and Industrial Hygienist**

The health physicist and the industrial hygienist shall do the following:

- Determine the appropriate surface-swiping and bulk-sampling procedures.
- Determine if the possibility of contamination exists on internal surfaces or in liquids and sludges when the custodian is unable to certify the equipment is free of contamination. Inform the custodian when the equipment is considered “incompletely characterized.”
- Interpret and inform custodians of the results of samples taken on the equipment.
- Sign the Equipment Release. Note any restrictions on the Equipment Release and include the type of contamination that may be present in unsampled areas. When equipment sampling results show that contamination is below established levels, check the “without restrictions” box to certify that the equipment is safe to be transported or that it can be used by other DOE facilities, government agencies or their contractors, schools, universities, or the public.
- Advise the custodian on the proper cleaning procedures if the equipment is contaminated and must be cleaned before acceptance for repair, transfer, storage, or as excess.

### **3.2.3 Environmental Analyst**

The environmental analyst shall advise the custodian on the proper procedure for disposing waste generated during the cleaning of contaminated equipment that is subsequently intended for repair, transfer, storage, or excess.

### **3.2.4 Health and Safety Technician**

Health and safety technicians, both at the custodian's facility and in the DUS Group (applicable to excess and storage), shall do the following:

- Provide guidance to the custodian on how to complete the appropriate forms.
- Survey equipment for external radioactive contamination.
- Collect radiation and/or toxic material swipes.
- Collect bulk samples for analysis by the Radiation Measurements Laboratories in the Hazards Control Department.

### **3.3 Hazardous Waste Management Field Technician**

The HWM field technician shall do the following to assist the custodian:

- Bulk waste fluids/oils that are not contaminated with radioactive materials; those containing radioactive materials cannot be bulked.
- Provide guidance on the sampling and preparation of waste liquids contaminated with radioactive materials for disposal.
- Ensure that the required paperwork is complete and accurate before disposing waste materials.
- Collect samples of bulk liquids intended for excess or sale. Have the Environmental Protection Department analyze the samples.

### **3.4 Donation, Utilization, and Sales Group**

The DUS Group shall do the following for equipment to be stored:

- Enter the description of the equipment into the storage database, including any information about possible internal contamination.
- Keep the equipment in secondary containment while in storage.
- Ensure that any information relating to actual or possible contamination remains with the equipment.
- Return the containment to the appropriate custodian when the equipment is released back into service.

Do the following for equipment to be excessed (also applicable to equipment excessed directly from long-term storage):

- Make sure that the equipment is properly cleaned and packaged before it is accepted.
- Enter the description and condition of the equipment into the database, including any information about possible internal contamination.

- Ensure that the equipment documentation is complete (Equipment Release, Excess Equipment Card, Storage Request, results from equipment analyses, and MSDSs). Retain a copy for the files.
- Determine whether equipment contaminated with radioactive materials can be reutilized with restrictions.
- Offer for sale any equipment that is not picked for reutilization.

NOTE: Incompletely characterized equipment shall not be put up for sale to the general public, unless a means of sampling internal surfaces is determined and sampling indicates that contamination is below the applicable limits. Equipment whose liquids, sludges, or internal surfaces may be contaminated with hazardous materials (not radioactive materials) and cannot be sampled because such areas are inaccessible can be excessed to other government agencies and their contractors, universities, or schools. However, a warning about the internal contamination must be affixed to the equipment.

- Return any equipment not sold or excessed to the custodian.
- Return any secondary containment to its owner upon disposal of the equipment.

### **3.5 Services and Distribution Department**

The Traffic Office and the Shipping/Receiving Group within the Services and Distribution Department shall do the following:

- Ensure that any contaminated (or potentially contaminated) equipment is safely transported, and that all DOT regulations are complied with if such equipment is to be transported on public roads.
- Provide guidance on the packaging and preparation of equipment to be transported, and for materials that are or may be contaminated with hazardous or radioactive substances.

## **4.0 LLNL Contacts**

Contact the following, as appropriate, for further information or assistance:

- Donation, Utilization, and Sales Group, ext. 3-4704
- ES&H team for the area, ext. 2-8253
- Hazardous Waste Management Division, ext. 3-1996
- Manufacturing and Materials Engineering Division, ext. 2-4841
- Materials Management Section, ext. 2-0475
- Shipping/Receiving Group, ext. 2-7495
- Traffic Office, ext. 2-7492
- Transportation Group, ext. 2-7489

## Appendix A

### Terms and Definitions

custodian	The person responsible for (1) maintaining the equipment, (2) knowing the historical use of the property items, (3 ) sending the equipment offsite for repair, (4) transferring the equipment to another LLNL user or into storage, and (5) declaring the property as excess.
encapsulated fluids	Liquids or oils in sealed cavities in the equipment. <u>Examples:</u> Fluids/oils contained in enclosed, sealed cavities such as gear boxes, lathe head stocks, closed hydraulic systems, and vacuum pumps.
excess	Property that is obsolete or no longer required for the needs of a group within the Laboratory. Property that is determined to be excess is made available to other areas within the Laboratory and to government and state agencies, or is sold.
hazardous materials	Toxic materials, waste oils, and other materials that are considered to be hazardous to the environment. Radioactive materials are <i>not</i> included as hazardous materials.
incompletely characterized equipment	Equipment the custodian cannot sample and certify as being free of contamination because of the inaccessibility to internal surfaces, liquids, or sludges that may be contaminated with radioactive or toxic materials.
radioactive materials	Radioactive materials include activated material; sealed and unsealed sources; material that emits ionizing radiation; or any material, equipment, or system component determined to be or suspected of being contaminated.
reutilization	When a property item is declared as excess to the needs of LLNL and can either be acquired by other government agencies or their contractors, universities, or schools, or sold to the public to be used for the purposes originally intended (not as scrap).

secondary containment	Secondary containment can be a plastic or metal pan in which leaks, drips, or spillage can occur. Any piece of equipment that contains (or contained) fluids must be stored and/or transported in a secondary containment. Custodians are responsible for providing such secondary containment. The Machine Tool Services within the Material Fabrication Division can obtain the proper secondary containment for machine tools. In some cases, secondary containments are available for loan from the DUS Group.
scrap	Property that is disposed of for its value as metal or parts because it is no longer usable in its original form. Also, the process of disposing of unusable property for its value as metal or parts.
toxic materials	Materials (other than radioactive material) that may pose a hazard to personnel if inhaled, ingested, or handled. In this context, toxic materials are primarily metals (e.g., lead and beryllium) and other materials such as asbestos.
unencapsulated fluids	Liquids (oils, cleaning solvents, cutting fluids, coolants) that (1) are not contained in an enclosed, sealed cavity, (2) have the potential for becoming contaminated during the normal use of the equipment, and (3) could spill during transportation or movement.

## **Appendix B**

### **Guidelines for Excessing Used and Surplus Chemicals**

The Laboratory has established the "Chemical Exchange Warehouse (CHEW) Project in an attempt to minimize the generation of hazardous waste. This Project is managed by the Hazardous Waste Management Division of the Environmental Protection Department. Sections B.1 and B.2 below contain the types of used or surplus chemicals (either unopened or opened and not contaminated with hazardous materials) that can be submitted to CHEW to be recycled to other LLNL organizations or individuals. Unopened chemicals that cannot be reused onsite are sent to the DUS Group as excess or for sale.

#### **B.1 Potentially Acceptable Items**

The items below are acceptable for reuse at LLNL via CHEW.

- New chemicals\*
- Paints\*
- Adhesives/resins\*
- Opened/clean chemicals\*
- Cleaners\*
- Oils/solvents\*

#### **B.2 Unacceptable items**

The items below are unacceptable for reuse at LLNL via CHEW.

- Explosives\*
- Products with no demand or those that may be contaminated with radiation
- Customized mixtures
- Drug precursors
- Compressed gases\*
- Outdated chemicals
- Poorly packaged chemicals
- Inoperable spray cans
- Solutions in dispensing bottles
- DEA controlled drugs

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\* Materials that can be accepted by the DUS Group if unopened. These items will be made available for reutilization or sale.

## **B.3 Responsibilities for Excessing Chemicals**

### **B.3.1 Custodian**

Custodians shall do the following:

- Contact the area HWM field technician to determine if the surplus chemical can be processed through CHEW. For more details, see “Waste Matters,” UCRL-AR-110229-93-2 (November 1993).
- Make sure that chemicals leaving RMMAs are free of external radioactive contamination and are certified. Have your area health and safety technician test the chemicals from RMMAs, if necessary.
- Obtain written proof of certification for the chemical.

### **B.3.2 CHEW Project Personnel**

Personnel from CHEW shall do the following:

- Arrange to have unopened chemicals transferred from CHEW to the DUS Group for entry into the standard excess process. Note: Large volumes of materials, including those of value, or opened containers that have been sampled and found to be free of radioactive or hazardous contamination may be processed through the DUS Group. Contact the ES&H team for guidance.
- Dispose of chemicals that cannot be sold or donated as hazardous waste.
- Ensure that unopened chemicals accepted or purchased by another organization are packaged and shipped in accordance with the DOT requirements. Only trained personnel from CHEW or the Shipping/Receiving Group within the Services and Distribution Department may package such chemicals.

### **B.3.3 Donation, Utilization, and Sales Group**

The DUS Group shall do the following:

- Sell or transfer chemicals only for the use intended by the original manufacturer. The receiving organization must certify that it will use the chemical for its intended purpose.
- Maintain a record of certification.
- Initiate a Shipping Document (Form 1095.3) upon identifying an organization willing to accept or purchase the chemical. Send a copy of this document to the Shipping/Receiving Group and CHEW. Make sure that the name and telephone number of a point of contact for the receiving organization is on the document.

### **B.3.3 Services and Distribution Department**

**Shipping/Receiving Group.** The Shipping/Receiving Group, with assistance from the Traffic Office, shall inspect packaged materials to verify that they meet and are transported in accordance with DOT requirements. *Chemicals that are not in compliance with DOT regulations will not be allowed to leave the LLNL Site.* In addition, the Shipping/Receiving Group shall do the following:

- Determine if the receiving organization requires the material to be shipped freight-collect or prefers to pick up the material at B-411.
- Arrange to either ship the material (COD) or have the receiving organization pick it up at B-411. If the receiving organization agrees to pick up the material, personnel from CHEW will arrange to have it transported to B-411.
- Ensure that packages received are in compliance with DOT and LLNL Hazardous Material Packaging and Transportation (HMPT) requirements.

**Traffic Office.** The Traffic Office shall do the following:

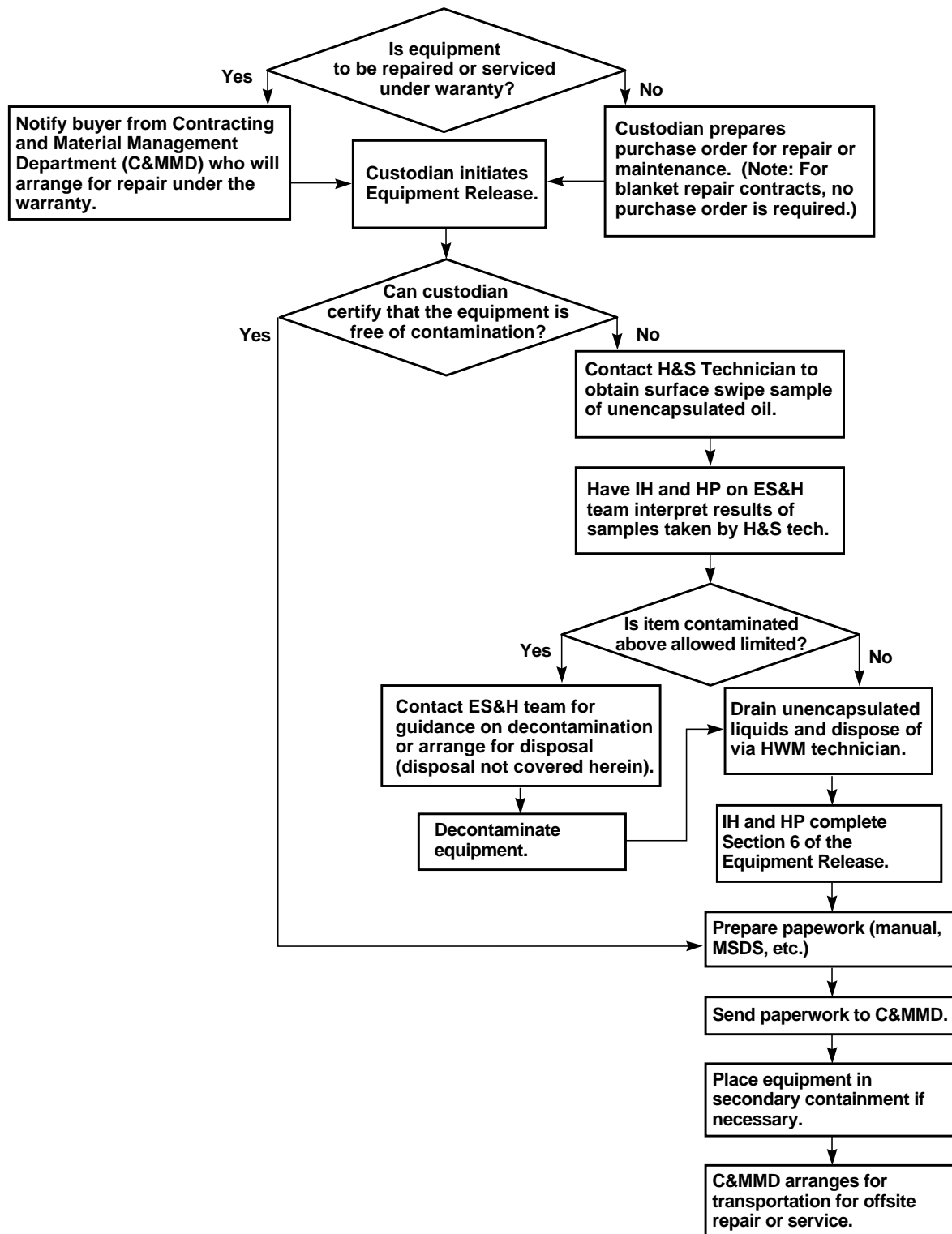
- Ensure that chemicals are transported in accordance with LLNL HMPT and DOT requirements.
- Ensure that drivers and vehicles used to transport chemicals meet DOT requirements before leaving the LLNL site.
- Inspect, at its discretion, the vehicle used to transport the chemical prior to the chemical being picked up.
- Arrange for material to be shipped freight-collect, if required.



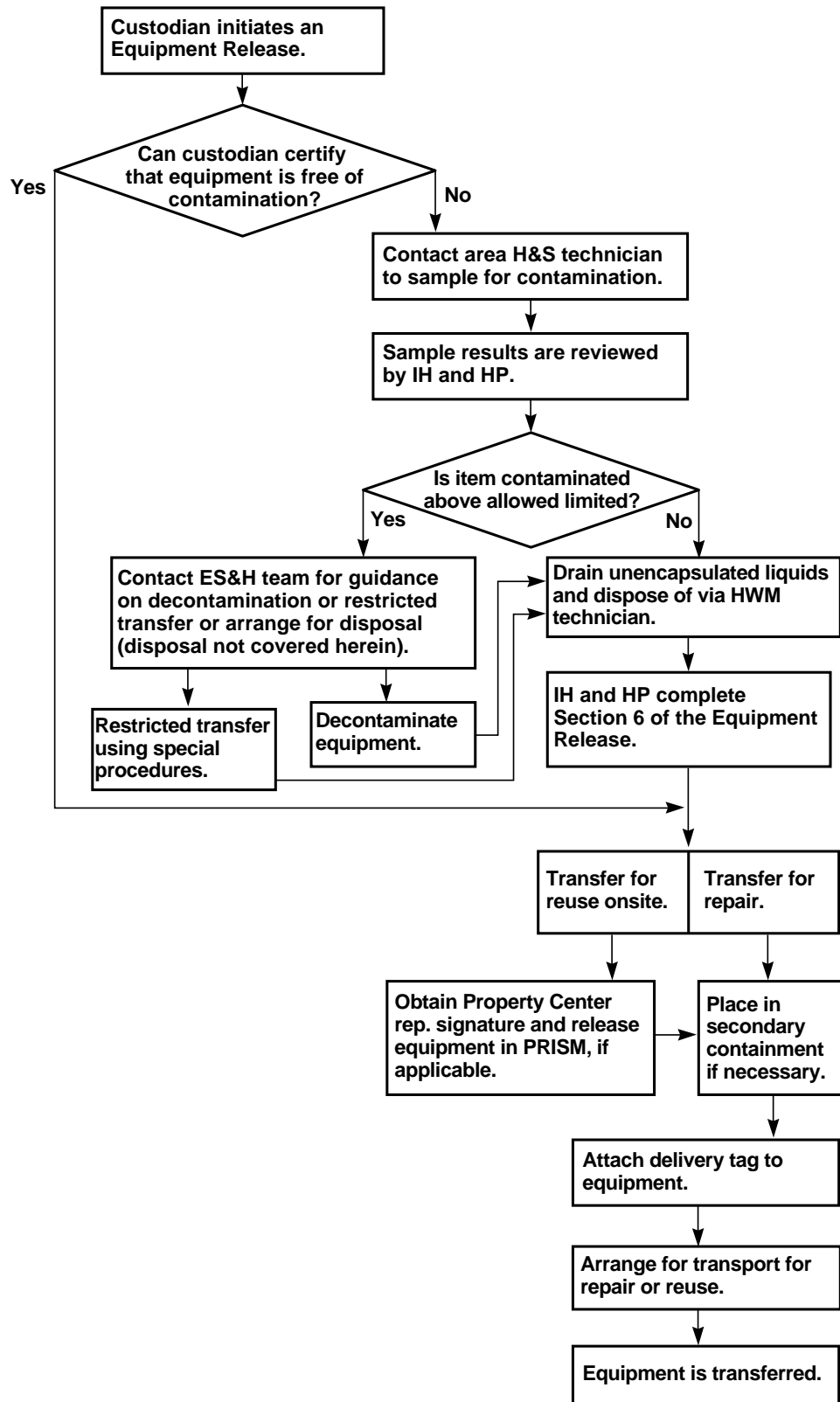
## **Appendix C**

### **Summary of Procedures**

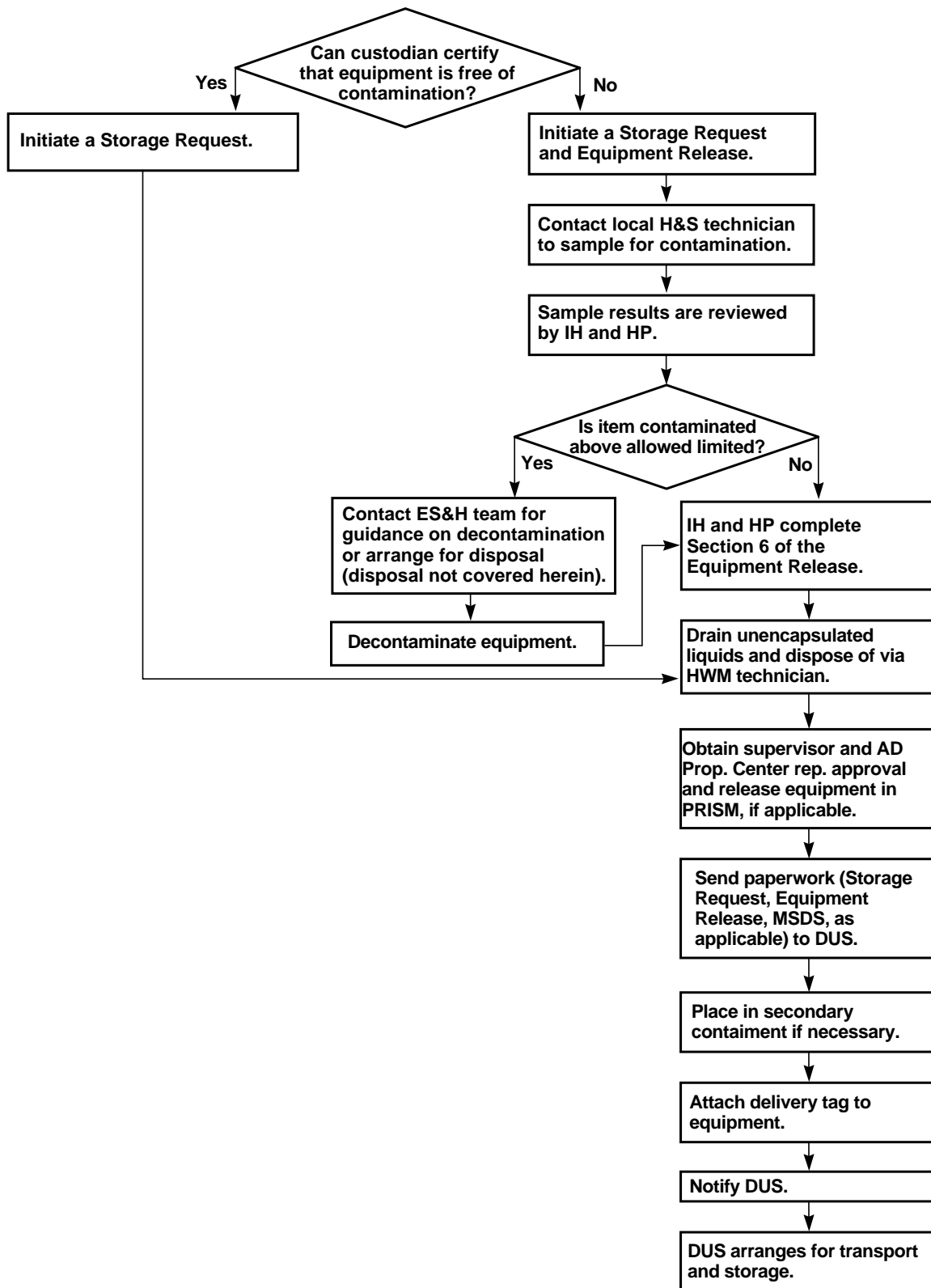
## Transfer of Equipment Offsite for Repair or Maintenance



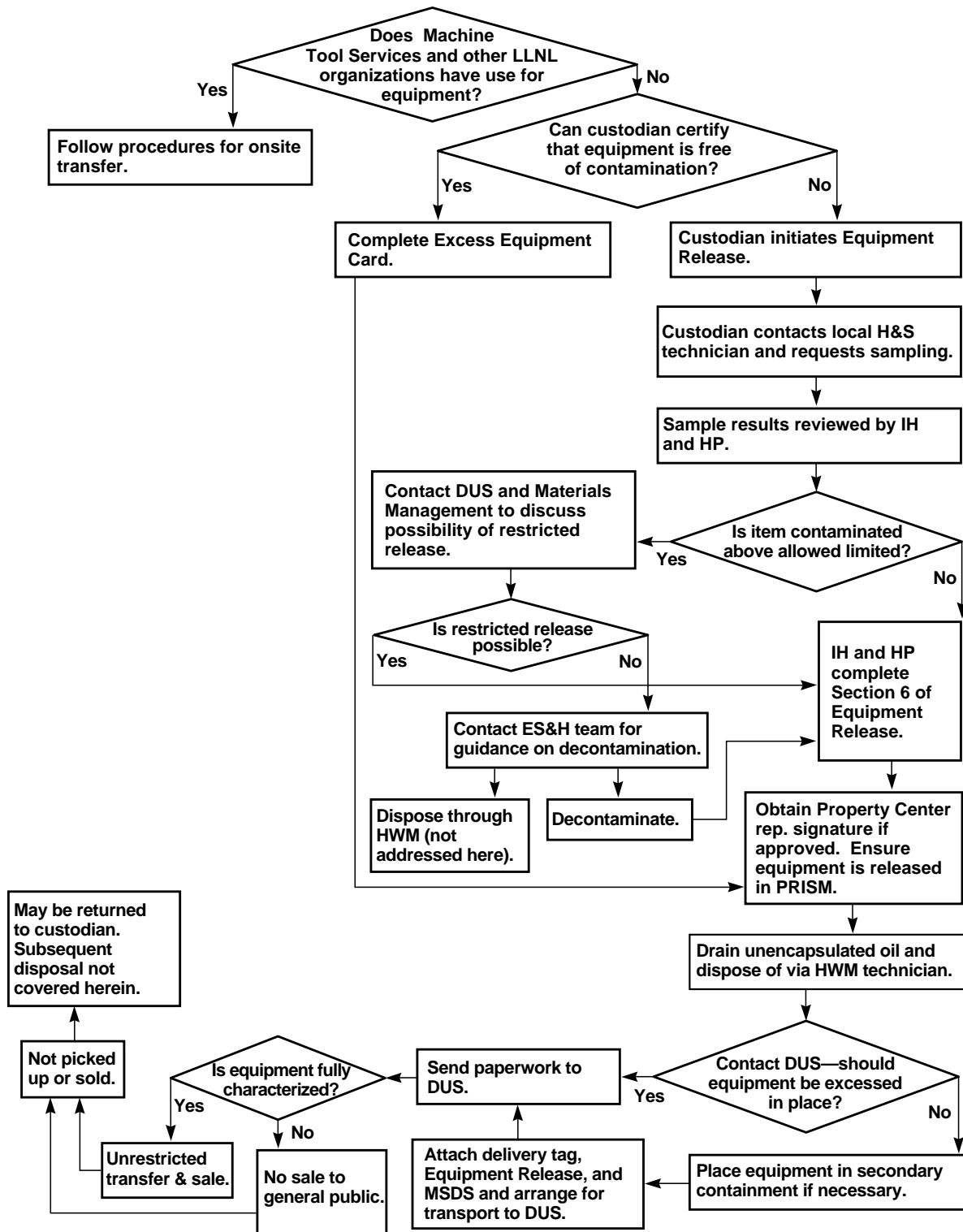
## Transfer of Equipment Onsite for Repair or Reuse



## Transfer of Equipment for Storage



## Transfer of Equipment for Excess or Sale





## **Appendix D**

### **Forms**

This appendix contains the following:

- Equipment Release.
- Storage Request, LL-4287.
- Excess Equipment Card, LL-6348, with instructions on the reverse side.



## **Equipment Release**

DOC No. R

# Equipment Release

(Refer to Supplement 8.07, *Health & Safety Manual*)

BOX 1 Complete this section for all property items.					
Item Description					Prop. No.
Manufacturer		Model	Serial Number	Acq. Amt.	Acq. Date
Submitted by:		Employee #	Ext.	Date	

**BOX 2 Custodian:** Complete this section to certify that, to the best of your knowledge, the equipment being released has not been exposed to hazardous, toxic, or radioactive contamination or contains no unencapsulated liquids.

Custodian signature:	Date:
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**BOX 3 Custodian: Complete this section for all equipment/material being excessed.**

Condition Code: ☐ Good ☐ Minor repairs ☐ Major repairs

**BOX 4 Custodian: Complete for all capital and attractive items being transferred or excessed.**

Property number	Releasing custodian's signature	Employee #	Ext.
Releasing property center name	Property center signature	L-Code	

**BOX 5 Custodian: Complete for all equipment.**

Yes	No	N/A					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unencapsulated liquids, if any, have been drained and sampled. Sample Analysis Sheet has been reviewed by appropriate ES&H team member(s). (See release signature(s) below.)				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Exterior swipes of the equipment have been taken and analyzed by appropriate ES&H team member(s). Activation analysis has been conducted where necessary. (See release signature(s) below.)				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MSDS(s) is attached for any fluids remaining in the equipment. Secondary containment has been provided.				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	( <i>machine tools only</i> ) Machine Tool Services has been notified that this equipment is being disposed of and concurs:				
<hr/> <table border="0" style="width: 100%;"> <tr> <td style="width: 25%;"><i>Print Name</i></td> <td style="width: 25%;"><i>Emp No.</i></td> <td style="width: 25%;"><i>Print Title</i></td> <td style="width: 25%;"><i>Signature</i></td> </tr> </table>				<i>Print Name</i>	<i>Emp No.</i>	<i>Print Title</i>	<i>Signature</i>
<i>Print Name</i>	<i>Emp No.</i>	<i>Print Title</i>	<i>Signature</i>				

**BOX 6 To be completed by ES&H Team Personnel.**

Analytical Sample Number(s) \_\_\_\_\_

This equipment has been evaluated and is releasable for: \_\_\_\_\_ (circle one)      Repair      Storage      Transfer      Excess

☐ without restrictions      ☐ with the following restrictions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Team Industrial Hygienist \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_      ☐ fully characterized

*Print Name*      *Signature*      *Date*

Team Health Physicist \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_      ☐ not fully characterized

*Print Name*      *Signature*      *Date*

**BOX 7 Steward/Property Center Change (Complete for all property-numbered items being transferred.)**

(Releasing) Property Center _____				
	<i>Print Name</i>	<i>Extension</i>	<i>L-Code</i>	<i>Property Center Representative Signature</i>
(New) Property Center _____				
	<i>Print Name</i>	<i>Extension</i>	<i>L-Code</i>	<i>Property Center Representative Signature</i>
<b>ACCEPT</b> <input type="checkbox"/> <b>DENY</b> <input type="checkbox"/>				

To be completed by Excess Turn-in Center personnel			E-Tag:
Comments:			Condition code:
Rec'd by	Date Rec'd	Bldg.	Room

Distribution:	White: Property center	Green: Custodian	Canary: Excess	Pink: Excess	Buff: Excess
Attachments:	Sample Analysis Sheet/ Material Safety Data Sheet(s)/Storage Request				Rev. 8/94

## **Storage Request**



## **Excess Equipment Card**